## **Annual Report**



## Next Steps.



## What's Inside

Welcome to the San Francisco Public Utilities Commission's Sewer System Improvement Program's FY21-22 Annual Report.

The purpose of this report is to provide a recap of the Program's projects and accomplishments, identify resources for obtaining more information, and preview next year's activities. You will also learn about our community benefit activities and workforce development achievements. This edition covers July 2021 - June 2022.

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Photography by Robin Scheswohl and Sabrina Wong, SFPUC staff photographers.



Crewmembers on the Mission Street, 16th to Cesar Chavez, Brick Sewer Rehabilitation Project. The project uses a trenchless method called cured-in-place pipe (CIPP) technology to rehabilitate the brick sewer tunnel. CIPP lining is pulled into place and cured with hot water.

## The SSIP is Adapting to Address Tomorrow's Challenges

The Sewer System Improvement Program (SSIP) is a major component of the City of San Francisco's comprehensive approach to addressing the issues of Aging Infrastructure, Seismic Vulnerability, Climate Change and Stormwater Management, Water Quality, and Responsible Resource Recovery by incorporating new technologies to improve our communities and quality of life. We are now almost a decade into the multi-billiondollar, citywide Program, investing in a modern, reliable, resilient, and sustainable system to protect public health and our environment for now and generations to come.

2021/2022 was a period of adjustment as we continued to adapt to the post-pandemic world, still struggling with supply chain issues and rising inflation. Having successfully navigated the major challenges of 2020 and 2021, we continue to respond to the needs of the City and its residents while upgrading critical sewer system infrastructure. Through these challenging times, our projects offered job training and contracting opportunities to the local community, kept people working and made steady progress improving our system.

This fiscal year saw the completion of the Southeast Treatment Plant (SEP) Seismic Reliability and Condition Assessment Improvements, the first phase of both the Geary Sewer & Water contract and L Taraval Corridor Improvement Project, the second phase of the Sunset Boulevard Greenway, and several grant funded green infrastructure projects. Major construction continuing at SEP, most notably the completion of foundation work on the future Biosolids Digester Facilities Project. Similarly, significant progress was made on the SEP New Headworks. Facility Project with completed demolition on a former maintenance structure to make room for the relocated odor control facility.

This 2021-2022 annual report provides a review of our efforts, and recent accomplishments, and a look ahead to the year to come as we continue to invest in our critical facilities, the people who build and run them, and the communities in which they're located.



Southeast Treatment Plant, Headworks Facility Project.

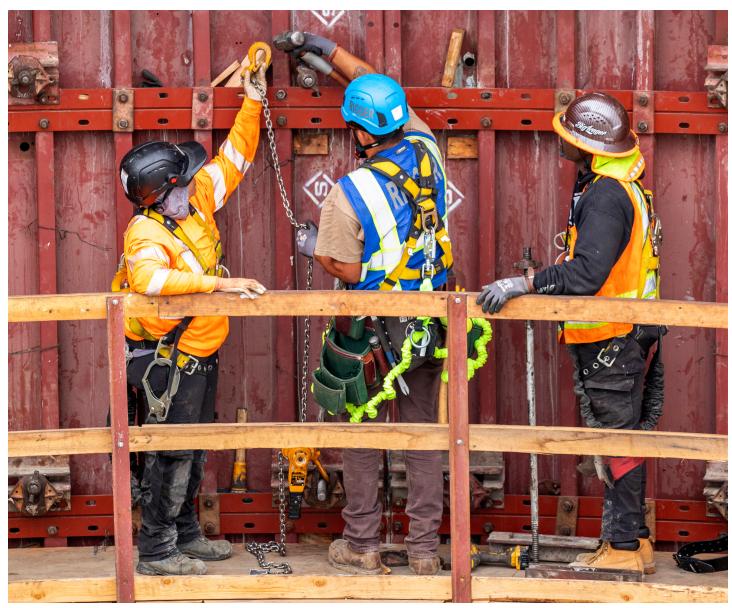
## Programmatic Overview

The SSIP is charged with implementing efficient, high quality, and reliable wastewater projects that directly support our quality of life.

We operate our wastewater system 24 hours a day, 7 days a week, 365 days a year, in a manner that is inclusive of environmental and community interests, and sustains the resources entrusted to our care. The Wastewater Enterprise is responsible for more than 1,000 miles of sewers, 25,000 storm drains, and three

treatment facilities—the oldest and largest allweather facility of which was built in 1952—the Southeast Treatment Plant.

The SSIP supplements our Renewal and Replacement Program by making significant capital investments to upgrade and modernize our aging system to ensure a resilient, reliable, and sustainable system now and for generations to come.



Southeast Treatment Plant Biosolids Digester Facilities Project: Facility 610. Rebar installation for digester tank walls.

# San Francisco's Challenges and SSIP Levels of Service (LOS)

#### Committed to a Measurable, Results-Driven Approach

The SSIP uses specific, measurable criteria and factors, known as Levels of Service (LOS), to prioritize projects and evaluate Program success as we address current and future challenges. The LOS goals ensure that the projects not only meet our technical needs but work to balance social, environmental, and financial factors, while managing program and project-level risk.

#### Levels of Service (LOS) Guide our Work:



Provide a Reliable and Resilient System that can Respond to Catastrophic **Events**. Ensuring treatment of flows within 72 hours of a major earthquake.



**Integrate Green and Grey Infrastructure** to Manage Stormwater and Minimize **Flooding**. Reducing stormwater impacts on neighborhoods and the sewer system.



∠ Provide Benefits to Impacted Communities. Alleviating odors and other impacts while providing both economic and job opportunities.



Modify the System to Adapt to Climate **Change**. Building facilities with climate change design criteria to respond more effectively to the rising sea level and other impacts.



**Achieve Economic and Environmental** Sustainability. Reusing and conserving the by-products of our wastewater and stormwater treatment systems.



#### Maintain Ratepayer Affordability.

Keeping customer bills less than 2.5% of an average household income for a single-family residence.



Ocean Beach Climate Change Adaptation Project short-term improvements phase: Press conference. SFPUC Acting General Manager Michael Carlin greets Congresswoman Jackie Speier.



Wawona Area Stormwater Improvement and Vicente Street Water Main Replacement: Wawona Construction site tour with Stephen Robinson (WWE Capital Program Director / Assistant General Manager for Infrastructure), City Attorneys, other staff. Vicente Street between 19th & 20th Avenues.

## Performance Metrics

The scope, schedules, and budgets of SSIP's baseline were revised in early 2020 and approved by the SFPUC Commission on December 22, 2020. Entering fiscal year 21/22, SSIP management continues to utilize the rolling two-year budget and 10-year capital planning cycle process to regularly evaluate and re-prioritize future projects. This process provides a more adaptable and sustainable approach to review and refine scope needs and establish more accurate schedule and budget forecasts. Below are metrics that demonstrate progress across the Program. More detailed information can be found in our Quarterly Reports.

#### **SSIP Project Count**

Planning **\$27m** (2 Projects)

Design **\$152m** (5 Projects)

Bid & Award **\$0** (O Projects)

Construction **\$2,920m** (12 Projects)

Close-Out **\$181m** (13 Projects)

Completed **\$373m** (38 Projects)

TOTAL **\$3,655m** (70 Projects)

#### **Total Budget Spent**

Budget: **\$2.261B** 

Spent: **\$1.086B** 

#### SSIP Phase 1 Completion 52%

All data is through June 2022



Project Engineer Alejandro Montero (BCI), Construction Management Bureau Lead Quality Assurance Inspector Arlando Victorio (Parsons) and Engineering Management Bureau Associate Engineer William Yu examining the concrete surface finish on the SEP Power Feed and Primary Switchgear Upgrades.



Wawona Area Stormwater Improvement and Vicente Street Water Main Replacement: Sewer microtunneling at jacking pit on Vicente Street between 19th and 20th Avenues. Lowering Intermediate Jacking Station with hydraulic piping. Segment 13.1-feet in length, 47 1/4 interior diameter and 53-inch exterior diameter.

# Investing in our Communities while Building our Projects

By exceeding the City's local hiring requirements with our infrastructure investments, the SFPUC is contributing to San Francisco's ongoing economic vitality by strengthening its neighborhoods, businesses, and workforce through:

Jobs: Most of our projects are covered by the San Francisco Local Hiring Policy for Construction and have a local (San Francisco resident) worker participation requirement of 30%. For apprenticeships, or entry-level workers, the requirement is 50%.\* The following numbers are estimates based on Certified Payroll Records submitted by contractors.

Local Hours: San Francisco residents have worked more than 715,000 of the total 2,034,909 craft hours on SSIP projects. This equates to 35.2% of the total hours, exceeding the Local Hire requirements of 20-30% depending on the contract advertisement date. San Francisco apprentices have worked over 153,000 hours, which accounts for 60.7% of all apprentice hours worked on SSIP and exceeds the 50% local apprentice requirement.

**Contracts:** The City also has a mandate for local community contractors to participate. Although the goals vary per contract, the SFPUC is committed to maximizing local participation on every project. On SSIP projects, Local Business Enterprise (LBE) prime and sub-contractors have been awarded \$490 million, which is approximately one out of every four dollars awarded on SSIP projects.

\* The Office of Economic and Workforce Development (OEWD) makes the final determination on each individual project's Local Hire compliance requirements. These numbers do not reflect any adjustments or other factors OEWD may require.

#### Percentage of Hours Worked

(required vs. actual)

All San Francisco Residents Goal **30%** Actual **35.2%** 

San Francisco Apprentices Goal 50% Actual 60.7%

All data is through June 2022



Cargo Way Box Sewer Odor Reduction Project: Jose Nuno. JMB Construction.

## **Projects**

#### **COLLECTION SYSTEM PROJECTS**

Central Bayside System Improvement Project

LARGE SEWERS, TUNNELS, AND ODOR CONTROL

- 21 Mission Bay Loop Sewer Improvements
- 22 Kansas & Marin Streets Sewer Improvements
- Cargo Way Sewer Box Odor Reduction
- Rutland Sewer Improvements
- Mission Street Brick Sewer Rehabilitation

#### PUMP STATIONS AND FORCE MAIN **IMPROVEMENTS**

- Westside Pump Station Improvements
- 3 Griffith Pump Station Improvements
- Hudson Avenue Pump Station and Outfall Improvements
- Ceasar Chavez Pump Station Improvements
- Marin Street Sewer Replacement
- Mariposa Dry Weather Pump Station and Force Main
- Force Main Rehab at Embarcadero & Jackson
- North Shore to Channel Force Main Improvements
- 38 North Shore Pump Station Wet Weather

#### FLOOD RESILIENCE PROJECTS

- Wawona Area Stormwater Improvement Project
- 41 Urbano/Victoria Hydraulic and Drainage Sewer Improvements
- Joost/Foerster Hydraulic and Drainage Sewer
- 49 Lower Alemany & Southeast Area Stormwater Improvements
- 49 Folsom Area Stormwater Improvement Project

#### COMBINED SEWER DISCHARGE STRUCTURES AND TRANSPORT/STORAGE BOXES

- 50 Richmond Transport/Storage Tunnel Rehabilitation
- 61 Beach St. CSD Rehabilitation Backflow Prevention Monitor
- 52 Sansome St. CSD Rehabilitation Backflow Prevention Monitor
- North Point Outfall System
- Drumm & Jackson Streets Rehabilitation Sewer System Improvements
- 55 5th, North 6th & Division Streets CSD Rehabilitation and Backflow Prevention
- 55 Pierce Street CSD Rehabilitation and Backflow
- Jackson Street CSD Rehabilitation and Backflow Prevention
- 69 Griffith Street CSD Rehabilitation and Backflow Prevention
- Squares indicate Completed Projects

Map and project areas not to scale

#### GREEN INFRASTRUCTURE & **EARLY IMPLEMENTATION PROJECTS**

- Baker Beach Green Streets
- Sunset Boulevard Greenway
- 3 Holloway Green Street
- 4 Visitacion Valley Green Nodes

- 8 Chinatown Living Alley
- 6 Balboa High School Regional Runoff Reduction

#### **LEGEND**

- Deep Water Outfalls

**OCEANSIDE** 



- Westside Pump Station reliability improvements
- · Odor control and energy efficiency enhancements

Mission and Valencia Streets Green Gateway 6 Upper Yosemite Creek Daylighting Wiggle Neighborhood Green Corridor **NORTH POINT** WET-WEATHER INTERDEPARTMENTAL PROJECTS NORTH POINT OUTFALL **FACILITY** A Van Ness Improvement Project B Geary Rapid Project c Central Subway Improvements **GOLDEN GATE** Masonic Avenue Streetscape Project BRIDGE Better Market Street Project Mission Bay Loop **©** L Taraval Improvement Project NORTH SHORE WATERSHED Treatment Facilities ♠ Transport/Storage Structures • Upgrade operational reliability and efficiency Refurbish outfall structure RICHMOND Tunnels • Structural and seismic upgrades Force Mains **SOUTHEAST** Interceptors & Tunnels Green Infrastructure TREATMENT PLANT CHANNEL WATERSHED SUNSET SOUTHEAST OUTFALL WATERSHED TREATMENT PLANT · Build new biosolids digesters facilities ISLAIS CREEK · Replace headworks facility WATERSHED Improvements for odor control Enhance visual aspects · Structural, seismic improvements. and treatment process YOSEMITE LAKE MERCED WATERSHED 61 SOUTHWEST OCEAN OUTFALL SUNNYDALE • Structural and seismic improvements

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### **Treatment**

Our SSIP treatment plant projects are bringing our facilities up to seismic standards, improving efficiency, enhancing reliability, and preparing our system against the growing severity of climate change and sea level rise. These efforts are essential to maintaining our quality of life and strengthening our communities and economy.

#### Southeast Treatment Plant

We are investing over \$3 billion in critical upgrades into San Francisco's largest treatment plant, located in the Bayview-Hunters Point neighborhood, to deliver a sustainable, resilient, and attractive modern resource recovery center. Our vision is to transform the facility into a source of pride for our staff, ratepayers, neighbors and all who live, work, and visit San Francisco.

#### **New Headworks Facility Project**

This past year, the New Headworks
Facility Project completed major critical
path milestones. The unique challenge of
maintaining operations and coordinating with
adjacent SEP projects while maneuvering in
the space constraints of the original footprint



Southeast Wastewater Treatment Plant: Biosolids Digester Facilities Project: Facility 610 (Anaerobic Digestion) preparing for pouring the concrete foundation.



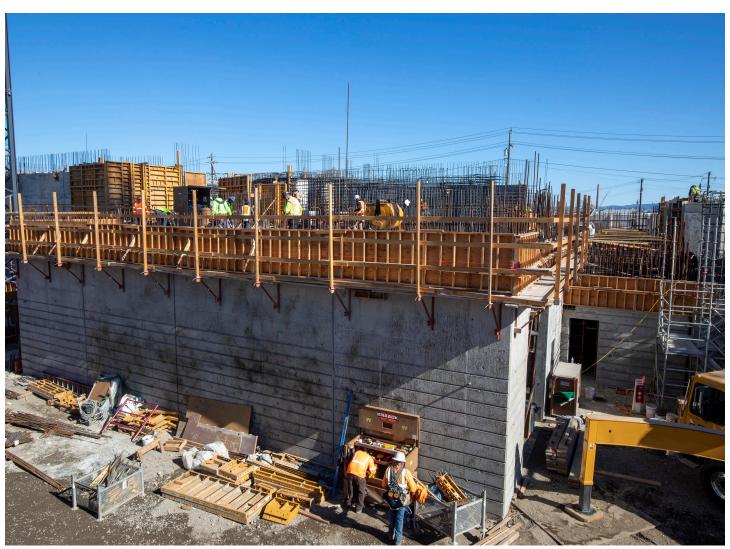
Rendering of new Biosolids Digester Facilities at the Southeast Treatment Plant.

to demolish the old and construct the new facilities, make it our most complex project. Much of the facility's structural work has been completed including the 12 grit tanks, and influent distribution and pumping areas.

The new facilities are designed for seismic sustainability in the event of a magnitude 7.9 earthquake occurring on the San Andreas fault and will help minimize odors, reduce operational costs and increase SEP's efficiency. In partnership with the San Francisco Arts Commission (SFAC), the project developed a temporary art program, launched two years ago to feature four local artists' artwork on the Evans Avenue construction fence, each for a period of one year. This fall will see the mural from Malik Seneferu replaced by new artwork from Nancy Cato.

#### **Biosolids Digester Facilities Project**

Our largest project, the Biosolids Digester Facilities Project (BDFP) remains a top priority for the SFPUC. This project will replace the existing outdated solids treatment facilities at the SEP with modern sustainable facilities. The new facilities will capture and treat odors more efficiently, produce a higher quality biosolids, and maximize biogas beneficial use. BDFP is being delivered under a Construction Manager/ General Contractor (CM/GC) delivery approach. In March 2021, the project team suspended bid procurement activities when bid costs came in unexpectedly high, to re-evaluate and confirm the project delivery approach, and to obtain independent cost estimates for the remaining construction work. SFPUC staff recommended to the Commission on



Crewmembers working on the Grit Tank Area at the new Headworks Facility Project at the Southeast Treatment Plant.

October 12, 2021, that the BDFP continue with the CM/GC delivery approach and proceed with a more competitive and revised bidding strategy for the construction of the remaining biosolids facilities. Maintaining the current CM/GC approach was determined to be the most viable means to maximize construction and site logistic efficiencies. With the major soil excavation, foundation and pile work completed last year, construction crews forged ahead and completed the concrete mat foundation for the five digester vessels in June 2022 and are proceeding with the erection of the digester skirt walls. Bid procurement for the remaining construction work will continue through 2024.

Also this past year, the BDFP achieved the Envision Platinum Award for sustainable infrastructure granted by the Institute for Sustainable Infrastructure (ISI). This is ISI's highest certification level and is based on an evaluation framework focused on sustainability, resiliency, and equity in civil infrastructure. The Envision Award was developed by ISI to provide a certification for public and private industrial/infrastructure facilities comparable to the Leadership in Energy and Environmental Design (LEED) building certification.

#### **Oceanside Treatment Plant**

The Oceanside Treatment Plant (OSP) and Westside Pump Station (WSS) wastewater treatment facilities are located next to the San Francisco Zoo and treat 20% of the City's wastewater.

The investments at OSP and WSS will ensure efficient operation, improve operational safety and seismic reliability, maintain permit compliance and ensure these facilities continue to protect public health and the environment. The project will replace and upgrade the existing outdated biogas energy recovery system at OSP.



Oceanside Water Pollution Control Plant (OSP) Digester Gas Utilization Upgrade at left, the new biogas (methane) holder tank assembly (exterior coated grey, adjacent to existing egg-shaped digesters). On site Construction activities are on-going to include installation of new siloxane gas removal equipment, associated piping and onsite pavement restoration.

Biogas, a natural byproduct from the wastewater treatment process, provides a 100% renewable alternative energy source to fossil-fuel that helps co-generate electrical power and produce hot water required for the plant wastewater treatment processes. Final construction is anticipated in 2024.

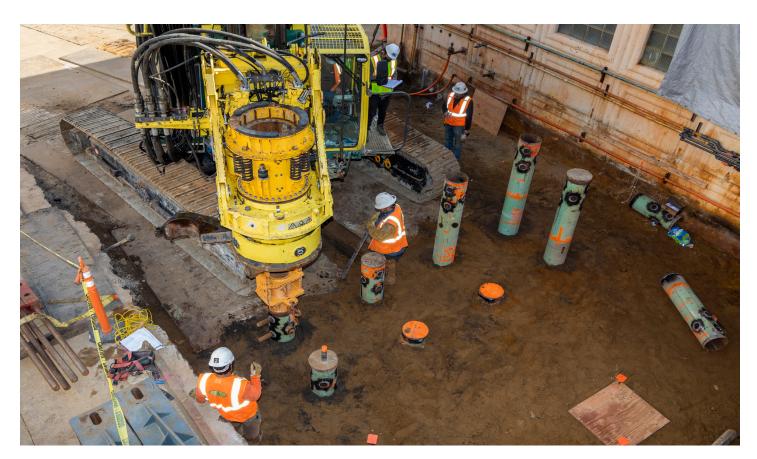
#### The Westside Pump Station Reliability **Improvements Project**

The WSS and associated facilities have been in service for numerous decades in the harsh marine environment. As part of the SSIP, the project is implementing improvements and modifications to ensure the WSS is reliable and operationally flexible, that it contains equipment redundancy, and remains compliant with State and Federal regulations. Construction on the project began in April 2021 and is anticipated to complete in Winter 2024.

#### North Point Wet Weather Facility

Located near Fisherman's Wharf, the North Point Wet Weather Facility (NPF) only operates when it's raining and the SEP does not have capacity to handle the combined stormwater and sewage flows. As an exclusive wet-weather treatment facility dedicated to reducing the rain's impact on the City's Bayside system, the NPF provides pre-treatment and primary-level treatment with disinfection of wastewater before discharging into the Bay during heavy storms.

Construction of the North Shore Wet Weather Pump Station Project began in Spring of 2021. The project will replace four dry weather pumps with larger units providing redundancy during wet weather, upgrade electrical and distributed control systems (DCS), address corrosion and ensure this facility continues to protect our community and the health of the Bay.



North Shore Pump Station Wet Weather Improvements: Driving 12 torque down piles into bedrock. The piles, along with rebar and concrete, will be part of creating a firm foundation upon which two ferrous chloride tanks will be placed.

## Collection

A vast city under the City, our sewer pipes, pump stations and catch basins, collect and convey wastewater to treatment facilities where it is cleaned and discharged into the San Francisco Bay or Pacific Ocean. These assets are critical components of San Francisco's wastewater operations. The Collection System improvements in the SSIP include upgrades that enhance collection system condition and reliability, improvements to stormwater management to reduce flooding, protection of assets against sea level rise, increased flexibility for wet weather operations, and protection of water quality. By completing these projects, SFPUC will continue to offer reliable and high-quality sewer services to all who live, work, and play in San Francisco.

#### **Pump Station Upgrades**

Originally built in 1954, the Mariposa Pump Station is a dry-weather pump station that pumps wastewater from the surrounding Mission Bay area to the SEP.



Mariposa Pump Station Improvements Project: Exterior sign installation.

The Mariposa Pump Station Improvements Project has reached substantial completion, resulting in a new, higher-capacity pump station. The project also replaced the existing dry-weather force main with a larger force main to accommodate the full buildout of the Mission Bay community, the new Chase Center, and planned population growth in the Potrero Hill neighborhood. Final project completion is anticipated in late 2022.

## Collection System Reliability Program

These projects help ensure that wastewater and stormwater are safely captured and delivered to our treatment plants 24/7.

Much of our work overlaps, literally and figuratively, with other City infrastructure projects, and the SFPUC partners with San Francisco Municipal Transportation Agency (SFMTA) and San Francisco Public Works (SFPW) to "dig once" where feasible to reduce impacts to the community and efficiently deliver projects. These interdepartmental projects include joint projects like the Geary Rapid Transit Program, L Taraval Improvement Project and the Better Market Street Improvement Project. Ongoing coordination allows us to upgrade aging sewer infrastructure while the City performs above ground surface and transit improvements. The partnership ensures maximization of City resources and minimization of disruption to the communities we serve.

As of June 2022, the first phase of both the Geary Sewer and Water, and the L Taraval Segment A contracts, have been completed, with work continuing on L Taraval Segment B. The design of the Geary Sewer and Water Phase 2 contract is underway.

Based on condition assessment of largediameter sewers (sewers larger than 36-inch in diameter), two capital projects were completed or near completion, including the Mission, 16th to Cesar Chavez Street, Brick Sewer Rehab Project that completed in 2021 and the New Montgomery Brick Sewer Rehabilitation Project that is nearing completion as of June 2022. Several other Large Diameter Sewer projects will be undergoing construction procurement in late 2022 and commence construction in early 2023, and three additional projects have advanced from planning to design phases. For these Large Diameter Sewer Rehabilitation Projects, the SFPUC is mostly using a trenchless construction method called Cured-in-Place-Pipe (CIPP), which involves accessing the pipe though existing manholes and rehabilitating the pipe from the inside and through existing manholes whenever feasible. This method reduces construction duration and is less disruptive to neighbors, avoiding open-trench excavation and minimizing street repaving. Using CIPL methodology, the New Montgomery Brick Sewer Rehabilitation Project launched in late 2021 and anticipated to be complete in early 2023, and several other projects will commence construction in late 2022.



Cargo Way Box Sewer Odor Reduction Project: 14-inch HDPE (High Density Polyethylene) pipe being lowered into the trench. Pipe is being joined together by electrofusion couplings.

#### Flood Resilience Projects

Each year, more than 10 billion gallons of rain falls on our City, and with climate change, heavy storms (such as atmospheric rivers) means much of this water hits our streets at once. Storms wash pollutants like motor oil and street litter into our city's mostly combined sewer system. They mix with sanitary sewage (i.e. from toilets, showers, and sinks) before being sent to treatment plants for cleaning and released back to the Bay or ocean.

The SFPUC continues to deliver programs, policies and projects to improve San Francisco's response and resilience in the face of intensifying storms. Several SSIP projects are in the design, planning and construction phases, respectively, to increase collection system conveyance capacity to be able to manage stormwater from a five-year, three-hour storm for the following areas:

Folsom Area Stormwater Improvement Project, located in the low-lying inner Mission neighborhood around 17th and 18th streets; the Lower Alemany Area Stormwater Improvement Project surrounding the US 101 and I-280 interchange; and the Wawona Area Stormwater Improvement Project, located around 15th Avenue and Wawona Street, which began construction in early 2021 and is expected to complete in late 2023 or early 2024.

Additional flood resilience and stormwater management projects are included in the 10-year Capital Improvement Plan. No sewer system can handle the heaviest of storms, so the SFPUC is coordinating with other City agencies to advance a comprehensive program to build flood resilience into the fabric of our City. Learn more at sfpuc.org/rain-ready.

#### Green Infrastructure Stormwater **Management Projects**

As we upgrade our aging combined sewer system, we are integrating a mix of green and grey infrastructure projects to better manage stormwater and reduce the pressure on the City's combined sewer system during heavy rains. Managing stormwater, which may otherwise wash pollutants into our waterways or overwhelm our sewer system, is critical to protecting water quality, wildlife and public health. Green infrastructure is a stormwater management tool that takes advantage of the natural processes of soils and plants to slow down and clean stormwater, keeping it from overwhelming the City's sewer system.

The SFPUC is moving closer to the City's goal of managing one billion gallons of stormwater with green infrastructure by 2050.

Construction was completed in Fall 2021 on the second phase of Sunset Boulevard Greenway. a green infrastructure project extending over two miles of Sunset Boulevard from Sloat Boulevard to Irving Street. The Phase 2 project features rain gardens that manage stormwater runoff from 14 blocks of Sunset Boulevard and 37th Avenue. Rain gardens have been placed strategically along the western side of the street in an effort to significantly reduce the stormwater entering the sewer system and infiltrate stormwater into the soil to help replenish groundwater reserves. Located directly in front of St. Ignatius College Preparatory, the project includes an educational learning lab and community space for students to sit and experience green infrastructure in action. If you are in the area, take a walking tour and learn more from the Sunset Boulevard Greenway Ribbon Cutting.

The Upper Yosemite Creek Daylighting project is the last of eight initial early implementation pilot projects. After a hiatus during the pandemic, planning activities recently resumed. The project will manage stormwater from 106 acres of McLaren Park including flows from Yosemite Marsh and McNab Lake. Daylighting the historic Yosemite Creek will collect excess stormwater that currently flows along Oxford Street, Wayland Street, and University Avenue. The current schedule anticipates final project design by Fall 2023, with start of construction on the project likely to occur around Summer 2024.

#### Sunset Boulevard Greenway Phase II:

- Stormwater Managed: 4.9 million gallons per year
- Drainage Area: 21.1 acres
- Total Rain Garden Areas: 25,420 square feet
- Completed construction in 2021



Sunset Boulevard Greenway: Sunset Boulevard & Kirkham Street.

#### Baker Beach Green Street Project:

- Stormwater Managed: 3.0 million gallons per year (Approximately reducing the total volume of stormwater entering the sewer system from the project site by 96%)
- Drainage area: 15.8 acres
- Baker BMP footprints:
- Bioretention 6,048 square feet
- Permeable Pavement 5,820 square feet
- Infiltration Galleries 6,738 square feet
- Total 18,606 square feet
- Completed construction in 2021



Baker Beach Green Streets: El Camino Del Mar between Legion of Honor Drive to 32nd Avenue.

#### **Green Infrastructure Grant Program**

During FY21-22, two new Green Infrastructure Grant applications were received, and two new projects were awarded Green Infrastructure Grants: St. Emydius Church and School Project (\$837,000) and Church of the Visitacion Church and School Project (\$1,727,000). One previously awarded project, St. Thomas More School completed project design while another previously awarded project, Lycee Francais SF Ortega Campus completed design and began construction. In addition, St. Anne of the Sunset Church and School began project design.

On March 22nd, 2022 the SFPUC Commission approved proposed modifications to the Green Infrastructure Grant Program Guidelines to reflect compliance with the Chapter 21G, revise grant team experience and co-benefit eligibility criteria, increase cap on planning and design costs, and revise other program requirements. Since the launch of the Green Infrastructure Grant Program in February 2019, the SFPUC has awarded grants to 11 projects with a total of approximately \$10,480,000 in funding.

With a high level of interest in the grant program, the grant team continued to conduct site visits and pre-application review meetings.



Green Infrastructure Grant Program: Lafayette Elementary School.

#### Status of Early Implementation **Projects**

The following tables include the status, drainage management area, performance, and green infrastructure technology features of all eight early implementation projects, each constructed in one of San Francisco's eight watersheds.



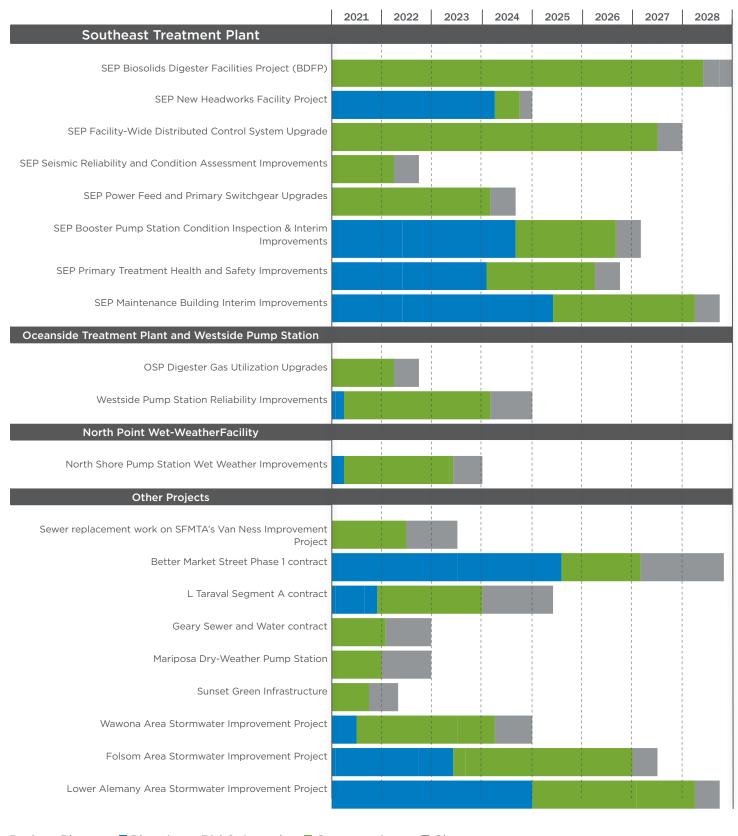
Bessie Carmichael Middle School Green Schoolyard and Green Infrastructure Grant Project: Rain garden and bioretention planters.

#### **Stormwater Management Performance**

Watershed	Project	Annual Runoff Removed from Sewer (gal/yr)	
Northshore	Chinatown Living Alley	3,000	
Channel	Wiggle Neighborhood Green Corridor	1,815,000	
Islais Creek	Mission & Valencia Green Gateway	1,121,000	
Yosemite	Yosemite Creek Daylighting Project	7,000,000	
Sunnydale	Visitacion Valley Green Nodes	994,000	
Lake Merced Holloway Green Street		897,000	
Sunset	Sunset Boulevard Greenway	5,333,000	
Richmond Baker Beach Green Streets		3,132,000	
Total	20,295,000		
<b>Total Without Yosen</b>	13,295,000		

Projects	Status	Drainage Management Area (In Acres)	Performance (gallons of Stormwater per year)	Features
Baker Beach Green Street	Completed	5.1	3M	15.8 acres of Drainage area, 6,048 square feet of Bioretention, 5,820 square feet of Permeable Pavement 6,738 square feet of Infiltration Galleries
Chinatown Green Alley	Completed	0.095	0.032M	203 Sft. of flow-through planters
Holloway Green Street	Completed	2	0.95M	18,444 square feet of permeable pavement/concrete; 2,250 square feet of rain gardens
Mission and Valencia Green Streets Gateway	Completed	2.2	1M	3,379 square feet of Rain gardens 1,215 square feet of Infiltration gallery
Visitacion Valley Green Nodes	Completed	1.85	1M	3,745 square feet of rain gardens
Wiggle Neighborhood Green Corridor	Completed	3.9	1.2M	1045 square feet of rain gardens; 7651 square feet permeable pavement
Sunset Boulevard Greenway	Completed	7.7	5.3M	16,826 square feet of rain gardens
Upper Yosemite Creek Daylighting	Design	106	7.3M	Daylighting of historic creek at McLaren Park

#### **Project Status**



Project Phases: ■ Planning - Bid & Award ■ Construction ■ Close-out

## Community Outreach

As we make critical investments in our infrastructure, the SFPUC aims to be a good neighbor by supporting our ratepayers, reaching out to our communities, engaging local businesses, expanding job training, and supporting neighborhood improvement initiatives.

#### Meeting (Virtually) in Your Neighborhood

The SFPUC Communications Team is focused on providing a variety of ways for our customers, ratepayers and stakeholders to participate in the planning and delivery of these critical projects. This includes our participation (virtually and in-person) in local organization events, citywide announcements and small group presentations and briefings.

With the easing of COVID-19 restrictions, the traditional ways of connecting and engaging with our stakeholders continue to evolve, providing a variety of ways to connect. All the while, our crews continued to deliver essential upgrades to ensure we continue to serve our communities.

#### Social Media and Online **Engagement**

Social media continues to be an excellent avenue to share information with community members and residents about the programs and projects taking place in their neighborhood. Video content continues to rise in popularity as our Communications Team continues to share information across multiple social media platforms. Videos continue to be a great way to share programs, partnerships and profiles of the amazing staff behind these important projects. Where large scale projects are underway, like at our SEP in the Bayview-Hunters Point, sharing regular bi-weekly construction updates keeps the community updated on progress and construction activities.

8,000+ eNewsletter Subscribers

10 Community Meetings and Workshops

**6** SEP Construction Site Tours

45 news articles/video segments

All data is through June 2022



Southeast Wastewater Treatment Plant: Biosolids Digester Facilities Project: Tour of site for Stanford Engineering Graduate students. Presenters included Carolyn Chiu (Senior Project Manager), Ryan Cayabyab (Construction Manager), Kendall Cantave (Safety Manager), Jorge Torres (Site Safety Representative), and Kristen Webb (Senior Outreach Liaison, Southeast Construction).

## Community Engagement

The SFPUC is the first public utility in the nation to adopt Environmental Justice and Community Benefits policies. Our "good neighbor" policies ensure we are giving back to the communities where we provide high-quality water, power, and sewer services. We are especially committed to working with communities that are most impacted by our operations. Guided by these policies, the SSIP is a once in a lifetime opportunity to leverage our investments and partnerships to support environmental, workforce, education, and art initiatives in the Bayview-Hunters Point neighborhood, which is home to our Southeast Treatment Plant.

#### Youth Employment: CityWorks

We are committed to supporting programs that educate, inspire, and prepare the next generation of our workforce for careers that support the critical systems on which we all rely. The CityWorks Internship Program concluded its eleventh year of providing paid summer internships to students from San Francisco's Southeast neighborhoods. This program is managed by Young Community Developers (YCD) and sponsored by internship hosts like SFPUC and private engineering firms fulfilling their social impact commitments.

In Summer 2022, 11 interns got to spend nine weeks working with various organizations on projects happening in their community.

While SFPUC was unable to host Cityworks interns this year, a number of our firm partners continued to support YCD and provided opportunities for students to learn about the professional services and training related to SFPUC service delivery and infrastructure upgrades.

CityWorks interns learned valuable on-the-job skills across multiple sectors. To date, over 100 students have participated in the CityWorks Internship Program, 38 interns have graduated college, 31 are currently attending a university, and 18 are currently enrolled in community college. SFPUC will continue to work internally to confirm funding and staffing arrangements for future years' programs.



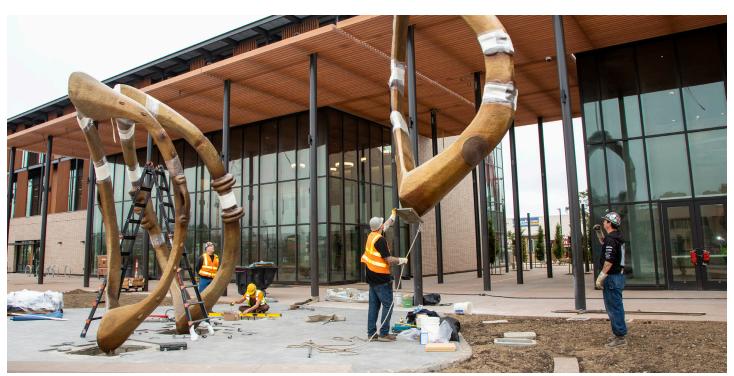
The SSIP CityWorks interns participate in a Southeast Treatment Plant facility tour to learn about the City and County of San Francisco's water, power, and sewer systems.

#### Fulfilling Our Art Commitments and **Beautifying Our Community**

As part of our city's Public Art Ordinance, the SFPUC is required to commit two percent of all above-ground infrastructure project costs to support arts enrichment. With a great deal of our SSIP projects taking place in the Bayview-Hunters Point (Bayview), we partnered with the San Francisco Arts Commission (SFAC) to create the Bayview Artist Registry. The registry allows local artists to submit their qualifications for public art opportunities related to a range of upcoming City construction projects in the Bayview, including at the Southeast Treatment Plant and the new Southeast Community Center, which is anticipated to celebrate the grand opening in Fall 2022. As part of our mission to be inclusive of environmental and community interests, we are proud to work with Bayview residents, the SFAC, and artists to ensure that SSIP's public art inspires our community and fosters respect for the environmental resources entrusted to our care.

#### **Small Business Development: Contractors Assistance Center**

We remain committed to supporting local and small businesses by providing them with the tools and resources to adequately get access to, compete for and participate in upcoming contracting opportunities. The Contractors Assistance Center helps these businesses build capacity and provides technical/administrative assistance to help make them competitive candidates for contracting opportunities around the City and on capital programs like the SSIP.



Southeast Community Center at 1550 Evans Avenue & 3rd Street: Internationally acclaimed artist Mildred Howard has been selected to create a sculpture that will be a centerpiece of the San Francisco Public Utilities Commission's (SF-PUC) new Southeast Community Center (SECC) in the Bayview neighborhood.

## Moving Forward

We are excited to see major construction milestones occur in the coming years. As we advance into FY22/23, seven of the eight green infrastructure stormwater management projects are complete, construction of major pump stations will be complete or nearing completion, and the Southeast Treatment Plant improvements will be nearing the halfway mark.

As our SSIP projects continue across our beautiful City, our goal remains the same: Be a good neighbor. We will work with residents to minimize construction impacts and continue to help our community leverage the benefits of project construction by providing opportunities for local residents and businesses to participate in the investments in their own communities. Under SSIP we are working together to rebuild and improve our combined sewer system now and for future generations. We look forward to seeing projects the community has helped plan become a reality in the coming years.



Southeast Community Center at 1550 Evans: Community Center exterior.















